

HEARING ON THE PRESENT AND FUTURE STATUS OF SBIR, FAST, & MEP PROGRAMS

HEARING BEFORE THE SUBCOMMITTEE ON WORKFORCE, EMPOWERMENT & GOVERNMENT PROGRAMS OF THE COMMITTEE ON SMALL BUSINESS HOUSE OF REPRESENTATIVES ONE HUNDRED EIGHTH CONGRESS FIRST SESSION

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PRESENT AND FUTURE STATUS OF SBIR, FAST, & MEP PROGRAMS

TUESDAY, MAY 6, 2003

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON WORKFORCE, EMPOWERMENT, AND
GOVERNMENT PROGRAMS
COMMITTEE ON SMALL BUSINESS,
Washington, D.C.

The Subcommittee met, pursuant to call, at 10:10 a.m., in Room 2360, Rayburn House Office Building, Hon. Todd Akin [chairman of the Subcommittee] presiding.

Present: Representatives Akin, Udall, Bordallo, and Faleomavaega.

Chairman AKIN. The Subcommittee on Small Business here will get started. I would like to start with an opening statement, and then I would ask my colleague, Mr. Udall from New Mexico, for his opening statement, and then we will be taking opening statements from our different witnesses. We will try and see if we can't get that knocked off reasonably quickly to allow time for questions. So let's go ahead and get started.

Good morning. Over the course of the last several months, a number of small business groups and owners have expressed their concerns to me and my staff regarding the elimination of Federal funding from programs such as the Small Business Innovative Research program, that is, SBIR; the Federal and State Technology partnership program, FAST; and the Manufacturing Extension Partnership program, MEP. They have encouraged me to seek continued Federal funding.

Both the SBIR and FAST programs are run out of the Government Contracting and Business Development Directorate of the Small Business Administration. Since its creation in 1982, the SBIR program has supported thousands of companies through awards for research and development. When the SBIR program was reauthorized in 2000, one of the changes made was the formation of the FAST program. The FAST program distributes competitive grants to States. This financial assistance is designed to enable the States to better support their respective SBIR programs. Presently SBA will not be able to fund the FAST program and is attempting to make the program workable under funding awarded at the State level.

The Department of Commerce's National Institute of Standards and Technology, NIST, runs the MEP program. The stated purpose of the program is to increase the competitiveness of small- and mid-sized U.S. manufacturers by bringing them state-of-the-art

technology and helping them institute best business practices. At its creation in 1988, the MEP program was given a sunset date which has subsequently been extended. The President's 2004 budget calls for the elimination of funding for the MEP program as originally intended by the Reagan administration.

In large part, I initiated this hearing for the express purpose of providing supporters of these programs their day in court, so to speak. How successful are the programs? Have they met the expectations for which they were originally designed? Will eliminating these programs truly have an adverse effect on small business? In my mind, these and other questions remain to be answered.

I look forward to hearing the testimony of our guests who I hope will answer some of these questions.

Before we take those testimonies, though, my respected colleague, Mr. Udall from New Mexico, I believe has an opening statement. And I think he gets three extra brownie points for coming here early on Tuesday morning and making that special effort to get into town. Thank you very much, Tom.

[Mr. Akin's statement may be found in the appendix.]

Mr. UDALL. Thank you very much, Mr. Chairman, and I very much appreciate you holding this hearing. My belief is these are important programs. They have had a significant impact in my State and I think also across the Nation. And so I think this is an important hearing to hold.

Today our economy faces an uphill battle. The latest figures reveal that the unemployment rate climbed to 6 percent in April, with 8.8 million people across the Nation currently out of work. One of the small business sectors that has suffered the most in this current economic slump is manufacturing. The manufacturing sector has been in steep decline since the beginning of 2000, with a net loss of more than 1.9 million factory jobs. This does not bode well for the U.S. economy as a whole, since the manufacturing industry is one of its cornerstones.

Our economy needs the right medicine to heal its ailments, and one prescription is small business. Small businesses are the lifeline of the American economy. They create three out of every four new jobs. They make up half of our GDP, and they are largely responsible for innovations in technology. They can lead our economy out of the current downturn and back to the road to recovery, but we need to give them a little help and the right tools in order to do so.

The right tools exist through Federal programs like the SBIR program, the Small Business Innovation Research program; the Federal and State Technology partnership program, the FAST program; and the MEP, the Manufacturing Extension Partnership.

Each of these initiatives could help revive many small business industries, including the weakened manufacturing sector; but in the latest budget, none of these programs received any funding, which seals their fate by ensuring their failure.

The SBIR program is testimony to the fact that small businesses have been responsible for the most significant innovations of the 20th century. The program was created to ensure that small businesses would be able to contribute to Federal research and development projects.

Over the years there has been no question the SBIR program is beneficial and fully lives up to its mission, but the rewards are concentrated in too few States and fail to permeate rural and economically depressed areas. To address this, the FAST program, a 5-year temporary initiative, was created in 2000 as a grant program designed not only to increase SBIR awards in States that have historically low volumes of them, but also to increase awards in low- and moderate-income States including rural areas. FAST helps to channel these types of opportunities where they are needed most.

In fact, I am proud to say we have a witness here from my home State of New Mexico, Ms. Barbara Stoller, who will talk about this program's many success stories, including SBIR—including a SBIR recipient that is now the largest employer of Native Americans in one of the poorest areas of our State. Such job creation, innovation, and economic growth in New Mexico would not have been possible, Mr. Chairman, without this program.

Another Federal initiative that gives small businesses, namely manufacturers, access to tools they need for success is the Manufacturing Extension Partnership program created in 1989. The MEP is a network of more than 400 not-for-profit centers nationwide that help sustain entrepreneurial development by providing small- and medium-sized manufacturers with technical and business solutions. MEP aids businesses in areas like process improvement, quality management systems, business management systems, human resource development, market development, materials engineering, environmental and financial planning and e-commerce.

Manufacturing firms that have utilized the program have seen nearly \$2.3 billion in new or retained sales, \$482 million in cost savings and \$873 million in new investment.

Even though these programs are vital to supporting small businesses, they give our government the most bang for the buck and they make good business sense. Their very existence has been threatened by the lack of funding. And I look forward to hearing today from all of the witnesses on these programs and look forward to the question session, Mr. Chairman. And with that, I would yield back.

[Mr. Udall's statement may be found in the appendix.]

Chairman AKIN. Thank you. I appreciate your opening statement. And I am looking forward also to the testimony. I thought what we might do would be to allow all four of our witnesses to testify first and then go into questions afterwards so we can get the flavor of everybody together.

And so our first witness in panel one is Mr. Darryl Hairston. He is the Associate Deputy Administrator for Government Contracting and Business Development.

Now, I guess you would have to tape two cards together to get that printed across there, but I have been told that that is absolutely right, and you are with the SBA. We are delighted to have you, and I think maybe if you go about 5 minutes, 6 minutes or so, and then we will continue across. Thank you very much, Darryl.

STATEMENT OF DARRYL HAIRSTON, DEPUTY ASSOCIATE DEPUTY ADMINISTRATOR FOR GOVERNMENT CONTRACTING AND BUSINESS DEVELOPMENT, SMALL BUSINESS ADMINISTRATION

Mr. HAIRSTON. Thank you. And good morning, Mr. Chairman, and distinguished members of the Subcommittee. I would like to thank you for inviting me to discuss the Federal and State Technology partnership program. This program provides technical assistance to small businesses that compete for granting contracts under the Small Business Innovation Research, or SBIR program, and the Small Business Technology Transfer, or STTR program.

I would like to request that my written statement be submitted for the record.

SBIR is a highly competitive program—

Chairman AKIN. Without objection.

Mr. HAIRSTON [continuing]. That encourages a small business to explore its technological potential and provides the incentive for the firm to profit from its commercialization. By including qualified small businesses in the Nation's research and development arena, high-tech innovation is stimulated, and the United States gains innovative approaches that meets its specific research and development needs.

STTR is another important program that expands funding opportunities for small businesses in the Federal research and development arena. A key component of the program is expansion of the public/private sector partnership to include joint venture opportunities for small business and the Nation's premier nonprofit research institutions. These relationships promote the transfer of technologies from laboratories to the marketplace, thereby stimulating the U.S. economy and supporting jobs.

In the 2000 SBIR Reauthorization Act, Congress authorized the FAST program to strengthen the technological competitiveness of small business concerns in all 50 States and 5 U.S. territories. FAST is a competitive program that allows each eligible State and territory to receive funding in the form of cooperative agreements to provide an array of services in support of the SBIR and STTR programs.

Any individual organization or entity in a State is eligible to participate in the FAST program. Congress also extended the SBIR rural outreach program which provides 25 States an opportunity to receive grant funding to support statewide efforts to increase their participation levels in the SBIR and STTR programs.

As States receiving less than \$5 million in SBIR and STTR awards in fiscal year 1995, these States met the participation criteria established by Public Law 105-135. A list of the FAST and SBIR rural outreach awardees, along with examples of program success stories as reported by the States can be viewed on the SBA-SBIR Web site. That is at www.sba.gov/sbir.

SBA continues to support the administration's request for fiscal year 2004 funding of \$3 million and \$500,000 for the FAST and rural outreach grant programs respectively.

The President asked for the same level of funding in fiscal year 2003, but Congress did not appropriate any funds. SBA does not plan to allocate funds for the FAST and rural outreach programs

in fiscal year 2003. Therefore, SBA is working with the existing FAST and rural outreach grant recipients to maximize the use of their existing grant funds to continue their efforts to assist small businesses during this fiscal year.

Participating agencies in the SBIR and STTR programs have reported a significant increase in the number of proposals received for their current solicitations, which we believe is attributable to outreach and training provided by FAST and rural outreach grant recipients.

The SBA in partnership with the FAST award recipients is helping to create new educational and outreach and mentoring programs that will assist States to increase their rate of small business growth and success. Many small businesses are unsuccessful during the innovation commercialization process. While entrepreneurs are technically capable, they often lack the business skills and contacts required to bring innovations to the marketplace. In addition, the small business risk is pushed to extremes in rural environments where access to experienced mentors is limited. The combination of innovation commercialization challenges and rural dispersion puts many small businesses at high risk for failure.

In its third year of operations, the FAST program continues to meet its objectives and impacts the technological capabilities of small businesses within the participating States while building sound State technology infrastructures for innovation and commercialization of products and services.

In fiscal year 2001, SBA issued 30 awards to eligible States totaling \$3.5 million and issued 27 awards totaling \$2.7 million in fiscal year 2002. Since the initial FAST program announcement was issued in April 2001, only Guam, the Virgin Islands, and American Samoa have not submitted a proposal to participate in the program. SBA has provided funding to 40 of the 55 eligible States and territories in the first 2 years of the FAST program.

SBA has included guidance for the FAST program in the revised SBIR and STTR policy directives. As required by law, SBA is in the process of drafting more detailed regulations for the FAST program. The SBA has taken time to carefully address program administration concerns raised since the issuance of the first program announcement. SBA plans to release these regulations as soon as possible for public comment.

SBA continues to assist small businesses with the challenges they face in doing business with the government. In support of the administration's electronic commerce initiative, the Department of Defense used an electronic proposal submission process to receive proposals in response to their two recent SBIR solicitations. However, DOD experienced unforeseen system problems which caused numerous small businesses to encounter difficulties submitting their proposals electronically. As part of our oversight responsibility, SBA worked with DOD to resolve this matter and to develop and implement backup procedures that can be put in place to ensure that this proposal submission process runs smoothly in the future.

SBA, through its program policy directives, will request all participating agencies in the SBIR and STTR programs that use elec-

tronic proposal systems to implement similar backup procedures and include them in future SBIR and STTR solicitations.

Chairman AKIN. Mr. Hairston, are you submitting that testimony to the record also?

Mr. HAIRSTON. I am.

[Mr. Hairston's statement may be found in the appendix.]

Chairman AKIN. Without objection. We are about out of time for your first block. Is there a way you could just summarize what you have left?

Mr. HAIRSTON. Well, thank you for the opportunity, and I will be happy to take your questions.

Chairman AKIN. Okay. Thank you very much.

Just before I go on with the next witness, Ms. Bordallo of Guam—you just mentioned Guam—has joined us, and we are very thankful to have you here. And especially, I was just—we are giving away extra brownie points for Tuesday morning Subcommittee hearing attendees, so you will have to get some of those.

Did you have a comment or anything?

Ms. BORDALLO. I do have a comment, Mr. Chairman, but I will wait.

Chairman AKIN. Do you want to wait till we get to the question time period?

What our strategy was this morning was to take the testimony of all four witnesses and then go to question at that point. Thank you.

Our second witness is Dr. Mike Nichols, SBIR, FAST, and MOFAST director from the good State of Missouri. He was founder of three—I think it was three small businesses yourself before you got in this business, so certainly it is something that is close to your heart. So we welcome you here and are interested in hearing your testimony, Dr. Nichols.

STATEMENT OF MIKE NICHOLS, SBIR, FAST AND MOFAST DIRECTOR, STATE OF MISSOURI

Mr. NICHOLS. Thank you, Mr. Chairman and members of the Subcommittee, and I want to thank you for inviting me here to testify on the status of the SBIR and FAST programs and why they are necessary for us to grow our high-tech economy.

I am here representing, as the Chairman has said, not only MOFAST, Missouri FAST program, but also the University of Missouri which sponsors the program as well as the SBDCs, the Small Business Development Centers, across the country. All of these entities are involved in bring this to a successful avenue in bringing high-tech jobs to the marketplace.

My life, as you have mentioned—this is close to me, because I started back in 1985 with a small business and an SBIR. I have been involved with the SBIR program since then as also a reviewer for NSF, NIH, and other agencies. So I have taken that and come full circle, so that now I am back actually lending my expertise as a mentor to this program to try and develop these businesses. And as I will show today, this has been very successful in only our first year.

You have before you my written testimony, and I would like to ask that that be submitted.

Chairman AKIN. Without objection.

Mr. NICHOLS. There are some attachments in that that I will refer to in this testimony, but let me summarize a few key points. FAST is just not a way to get grants between engineers and scientists. Actually, what it is is a way to build businesses and to build high-tech businesses, knowledge-based businesses, the kind that we need to face the problems that we are going to have in the future of this economy. What we provide is like a boot camp for entrepreneurs. We say as our motto, "Start, sustain, and smile because you are having fun".

We believe that integration here is the key. It is integrating the businesses and the business knowledge with the technology. That is what we have to provide. It is not just technology. States like Arkansas, Wisconsin, and Missouri use the same type of model where they have integrated the SBDC. We think that is a very good model.

Why is FAST necessary? FAST is necessary, because if you look at the wealth distribution for FAST grants, as was mentioned earlier by Mr. Udall, what you see is over 70 percent of the States are at the bottom end of the distribution. They receive less than 50 grants. So what you have basically is two States that receive 900 or more grants, and you have all the rest that are piled at the bottom. You basically have no middle class, and it was the middle class that actually took this country and moved it through the industrial revolution. And I think it is this middle class of knowledge-based economy that will actually move us forward and make us competitive in the world.

The FAST program really does reward creativity. If you look at the maps that are in my written testimony, you will see that things like creativity and patents and inventors are spread throughout the entire State, but then when you look at the number of SBIR awards classically that have been received in Missouri, you will find it is very, very few.

The two don't match. What we are doing in this program is we are connecting the dots, basically. We are bringing those people together with the resources that they need at hubs like the FAST program in order that we can develop these small high-tech businesses.

In 1983 through 2000, Missouri received only 178 awards. Some States receive 178 in one year. In 2001, we had 16 awards before the FAST program. In 2002, we have 32 awards, a 100 percent increase. In the first quarter of 2003, we have gotten 12 awards. When you compare that to historically per-year average of 10 to 12 awards for Missouri, we have done that good in the first quarter. Basically if you add up during this FAST program, in 18 months we have gotten 25 percent of all the awards that were given in 18 years. That is how powerful the program can be.

So, again we are connecting the dots. We are taking technical knowledge, seed funding, and business assistance and starting businesses. One of those dots was an individual who is called Tom, and that is also in your package, where in Cape Girardeau, a very rural community, he developed a way in which to attract both ticks and mosquitos, West Nile virus-bearing, and as well as lime disease insects. He has been successful already in raising \$1.2 million

and starting that company in Missouri alone. In other words, the money didn't leave Missouri. The jobs haven't left Missouri. They have stayed there. This is the type of thing which you can access with this type of program.

Let me just tell you also from a personal note, sometimes it is very difficult for us to be able to actually measure the impact of some of these programs, and one of the things I might say is that when I received some of the early SBIRs, they were actually for developing materials for implants for cochlear prosthesis and things like that, but that actually became very quickly a program for the Sandia labs. You may have heard of it at one time. It was called "Project Hunters Trophy," and it was a way in which we could then determine ways to eliminate underground nuclear testing. Those same materials used in the brain were used for that type of application. So basically we went from SBIR policies to a national policy to a safer environmental policy.

Basically what would happen if the FAST program does continue to go away, I think we will go back—and let me just use a quote from Churchill that basically when most people find innovation, what they do is stumble upon it; they pick themselves up and move on. What we do with the FAST program is we help them pick themselves back up. We show them the way in which to start the business, and then we move on to success in the business world.

I want to thank you.

Chairman AKIN. Thank you very much, Dr. Nichols. I appreciate your testimony. We will get back with some questions.

[Mr. Nichols' statement may be found in the appendix.]

Chairman AKIN. Our next witness is Mr. Rolf Albers, Chairman and CEO of Albers Manufacturing, a company that is in my own district. So I am very happy to be able to see some other Missouri people here, and I know that you have your own small business that the President visited not so long ago if I am not mistaken, and I am interested to hear your testimony, particularly as it relates to these programs.

Mr. Albers.

STATEMENT OF ROLF ALBERS, CHAIRMAN AND CEO, ALBERS MANUFACTURING

Mr. ALBERS. Thank you, Mr. Chairman and members of the Subcommittee. Thank you for inviting me to address this Subcommittee and tell you about a subject that I feel is of critical importance to manufacturers in our State and Nation.

Our plant is located in O'Fallon, Missouri, which is just west of St. Louis, and I also serve on the board of the Missouri Chamber of Commerce and the National Federation of Independent Business. I am also currently involved in the formation of a new organization called the Missouri Association for Advancing Manufacturing, or MAAM, to be a united voice for those Missouri companies on the front line of manufacturing.

At Albers manufacturing, we currently have 35 employees and manufacture a variety of electrical equipment for industry. I am here today to testify on behalf of my company to recommend that you continue funding the Manufacturing Extension Partnership, MEP. I have no personal experience with SBIR or FAST. However,

over the last 10 years I have had many occasions to use the services of the Missouri Enterprise Businesses Assistance Center which manages the Manufacturing Extension Partnership here in Missouri.

Missouri has lost over 77,000 jobs over the last 18 months. In my opinion, there are many reasons for this, but in general it has to do with the way Missouri supports manufacturers and small businesses. In my opinion, Missouri is not as business-friendly as it should be.

The State of Missouri has joined the Department of Commerce in funding the Manufacturing Extension Partnership. If Federal or State funding were to be reduced, companies like mine would lose a valuable resource. The Manufacturing Extension Partnership has made it possible for me to purchase a variety of services at reasonable rates. Without the Manufacturing Extension Program, my company probably would not have been able to afford them. In fact, we might not have had access to them at all, because they are not—some of them are not offered in any other way.

For example, Albers used a Manufacturing Extension Partnership to search for an ERP software package—that is the Enterprise Resource Planning software—suitable for the needs of a small manufacturer. MEP had the capability to help define our needs and select the most suitable package. We chose a software package called Job Boss, which has served us well over the last 5 years. It has made Albers more efficient because it puts all of our information in one single user-friendly database. Previously, four different and unconnected software programs handled many of our functions. New orders were entered in three different database programs. Now quotations and orders are all entered once. Shop floor scheduling is included as well as inventory control and all accounting functions. We can now print job travelers and control our jobs on monitors placed on the shop floor. This reduced our overhead and enabled us to stay more competitive.

When Albers decided to implement an ISO-9000 quality management system, training and seminars conducted by the MEP helped my employees understand the subject and the process. We were able also to implement such techniques as Kanban, 5-S and others, known as lean manufacturing, all of which contributed to improved efficiency and our competitiveness.

The Manufacturing Extension Partnership also assisted Albers Manufacturing when we needed to expand and reorganize the factory layout. The experts from MEP provided the special know-how required for an efficient floor plan.

All of these valuable technical services were available to us at a cost we could afford, because the MEP partnership is a true public/private partnership that is specially designed and structured to assist small- and medium-sized companies that, as Mr. Udall pointed out, employ over 60 percent of the workforce in the U.S.

MEP experts are all experienced, talented, and dedicated. They have not only talked the talk but walked the walk. It is the role of the Manufacturing Extension Partnership to collaborate with public and private leadership to reverse the flow of jobs out of our State and our country. Some of Albers Manufacturing employees, me included, have participated in seminars sponsored by the MEP.

Again, these services are either not offered by anyone else, or if they are, they tend to be priced beyond our means.

We have lost over 60 percent of our business in the last 2 years because most of our customers were in the telecommunications industry, which, as you know, is experiencing a major downturn. In an effort to locate new customers in different industries, we have had to rely on the resources provided by MEP to help us rethink our marketing approach and diversify our product line.

I am almost finished.

I know that Federal budgets are tight. However, the techniques, technologies, and training available to small companies like Albers Manufacturing by the MEP are of critical importance. Companies like ours need this assistance to improve our efficiency and compete with foreign competition. Our ability to create and maintain sustainable manufacturing jobs in Missouri and the rest of the U.S. is at stake, and there is no question that organizations like the MEP partnership are desperately needed.

Summarizing, I urge the members of this important Subcommittee to consider the situation facing thousands of companies like mine and to support the MEP with full funding as the fiscal year 2004 budget process moves ahead. I ask that this testimony be submitted, and thank you for inviting me.

Chairman AKIN. Without objection, and thank you for your testimony, Mr. Albers.

[Mr. Albers' statement may be found in the appendix.]

Chairman AKIN. Our final panelist and witness is Ms. Barbara Stoller. She is Director of SBIR Outreach Center, Technology Ventures Corporation, and hails from Mr. Udall's district in New Mexico. Barbara, a pleasure to have you here.

**STATEMENT OF BARBARA STOLLER, DIRECTOR, SBIR
OUTREACH CENTER, TECHNOLOGY VENTURES CORPORATION**

Ms. STOLLER. Thank you, Mr. Chairman, members of the Committee. I am Barbara Stoller. I am the Director of the New Mexico SBIR outreach program. That is an activity of Lockheed Martin's Technology Ventures Corporation and funded by the Los Alamos and Sandia National Laboratories and the FAST program.

The SBIR program represents a phenomenal opportunity for high-technology entrepreneurs, engineers, and scientists. The SBIR program enables them to obtain seed capital to demonstrate the feasibility of their innovations and to begin to mature their technologies into commercial products.

Unfortunately, knowledge of the SBIR program does not reach many segments of the high-tech business community or to the engineering and scientific fields. In addition, even when the existence of the SBIR program is known, dealing with the Federal Government and the SBIR participating agencies is often a frustrating and overwhelming task for those businesses and individuals unskilled in this craft.

As a consequence of these two issues, the lack of knowledge of SBIR and the fear of dealing with the Federal Government, our Nation suffers loss of unknown innovations that could significantly benefit our country, and this is the major problem the FAST program is designed to solve.

The objective of the FAST program is to conduct SBIR outreach and to get to that very large and dispersed community of high-tech small businesses and entrepreneurs who either are not informed about THE SBIR program or are afraid to attempt to participate in this.

These often present overwhelming barriers to participating in the SBIR program for the high-tech businesses and the entrepreneurs who lack that information of dealing with the Federal Government. This is the very community that the FAST program serves. The mission of the FAST program is to assist in bringing innovations to the commercial and government markets which otherwise would never see the light of day through expanded implementation of our SBIR program.

FAST allows the 27 participating States to do a number of outreach activities. We can educate the technical community regarding the existence of the SBIR program and the different variations of the 10 Federal agencies. We provide training conferences with national experts regarding the process of writing competitive SBIR proposals. We develop experienced mentors who act as advisers to the community of nonparticipating businesses and entrepreneurs, providing them hands-on guidance and advice on the lessons learned and how they have participated successfully in SBIR.

We are able to provide the critically needed information on the administrative and financial aspects of doing business with the Federal Government, and this achieves compliance with Federal acquisitions regulations. We are also able to implement a proposal-writing experts panel to manage the proposal writing process.

By way of State background, New Mexico is number 13 in the State rankings of SBIR successes. In the year 2001, we had 94 awards totaling \$22 million coming into our State. New Mexico is a technology-rich State because of the DOE and the DOD national laboratories, but these national laboratory clusters exist within an economically depressed State.

Similarly, in dealing with the Federal Government and knowing about the SBIR program, New Mexico also has clusters of government-savvy businesses and entrepreneurs dispersed throughout this much broader community that does not possess this information.

Here are a few examples of how New Mexico, assisted by the FAST, funding has contributed to the development of innovation in our State. One company started from an SBIR award, and they are now manufacturing photovoltaic cells. They are widely deployed to provide power on commercial satellites. Another company has developed a unique multispectral camera that is being flown in space for military and commercial projects.

A New Mexico SBIR start-up recently acquired by Boeing has become a major developer of components in the airborne laser program.

A New Mexico start-up that started up with SBIR performs demilitarization of munitions, and it is one of the largest employers of Native Americans in one of the poorest counties in our State.

Given the technology resources within New Mexico, these companies still are too few in number. The universities and other industries within New Mexico also represent economical potential that

is too often inadequately exploited or developed. But FAST is helping. New Mexico's SBIR outreach program housed at Lockheed Martin's Technology Ventures Corporation was initially funded 2 years ago by the Sandia and Los Alamos National Laboratories. New Mexico received its first FAST funding just 6 months ago.

So far the New Mexico SBIR outreach program has had some of the following accomplishments:

We have provided three SBIR basic courses to three different locations around the State in addition to our two quarterly proposal writing events.

We hosted the National SBIR Conference just in March of this year. It became one of the largest ever held. We had 645 registrants, and we had 43 States represented in New Mexico.

We assisted 107 companies with one-on-one counseling in 6 months. We initiated an electronic newsletter that reaches 700 technologists. Already in 6 months we are achieving success.

A one-person start-up, after attending just one SBIR training session, wrote a SBIR proposal to NIH for an innovative power source concept for a wheelchair. The proposal was funded and now engineering prototypes are being manufactured locally. This company also received the 2002 Tibbits Award. The social benefit is a more maneuverable, controllable, and powerful mobility device that will increase safety and freedom of power wheelchair users. Without FAST funding, this innovation might have been lost to society because the SBIR program represented this entrepreneur's only access to seed capital.

Another small company was making digital video recorders. They wrote one SBIR proposal, received a Phase 1 award from the Air Force. They have developed an instantaneous retrieval system for realtime surveillance. It is used in airports, unmanned aerial vehicles, and atmospheric science.

These are all—.

Chairman AKIN. We are getting close here on time.

Ms. STOLLER. A half page. They are all in the handouts that I have submitted.

Chairman AKIN. Those are, without objection—we have those in the record as well.

Ms. STOLLER. I am aware of dozens of SBIR proposals that have been submitted by companies and individuals who never before were involved in the SBIR program. So as a result of the additional FAST funding, they attended training sessions.

What major contributions to society await the maturation of these innovations? The FAST program is allowing knowledge of the SBIR program to be spread throughout the State. In addition, the engineers and scientists now are interacting with farmers, ranchers, miners, and environmentalists, all of which have innovative technology ideas and all of which could benefit from SBIR.

How many of these innovations and success stories will be lost if FAST funding is discontinued?

[Ms. Stoller's statement may be found in the appendix.]

Chairman AKIN. Thank you very much, Ms. Stoller. We have another panelist—not another panelist, but another member here that I would like to introduce, and that is Mr. Faleomavaega from Samoa. And I have mentioned to the other members here, Eni, that

you get the extra award for Subcommittee hearings before noon. So you are really doing well today, starting the week off well.

We have heard from all of our witnesses, and the next part of the procedure will be we will be able to ask some questions. I am going to forego some of my questions. I have quite a few, but I am going to go ahead and turn to our minority leader here. And, Tom, if you would like to start out. We will do 5 minutes' worth of questions. Then if you want, we can come back for a second pass just depending on what your schedules look like timewise.

Mr. UDALL. Great. Thank you very much, Mr. Chairman, and once again, let me tell you how much I appreciate you having this hearing and highlighting these three I think very important programs.

Before I start, let me also recognize, as you have said, Barbara Stoller, from New Mexico is here today, and has been one of the witnesses. Her boss and the president of Technology Ventures Corporation, Sherman McCorkle, is back there in the back. Sherman, raise your hand so everybody can see what a distinguished gentleman you are. Anyway, Sherman, it is a pleasure having you here, and this company is a dramatic example of how you take these programs, SBIR and others, and create jobs in New Mexico. And I believe Barbara has outlined that very well.

I want to thank all of the panelists, because I think each one of you in your testimony has highlighted the fact that these are important programs, they should continue, and that you would like to see them continue.

Now, turning to Mr. Hairston's testimony here, in your written testimony you talk about how you are going to support the administration's request for 2004 funding to the tune of \$3 million for FAST and \$500,000 for the rural outreach grant programs, but there is no funding in 2003, the Congress didn't appropriate funds.

And then you say in your testimony, the SBA does not plan to allocate funds for the FAST and outreach programs in fiscal year 2003.

Do you have the ability to allocate funds from other areas if you choose to?

Mr. HAIRSTON. We are fortunate in that we have the ability to carry over funds from prior-year funding, and our records indicate right now that about 80 percent of our State recipients at this time have come in for what we refer to as no-cost extensions to carry over funds from fiscal year 2002 to be able to provide that assistance in 2003.

At this point, I am not certain of our ability to reprogram any other decision in funds. I am not certain of the availability of additional funds that would be available for reprogramming at this time, but we do know we have at least 80 percent coverage from our prior-year funding.

Mr. UDALL. Well, I would just like to say that the panel here today I think has made a very good case for these programs and the continued funding, and I hope you would look and see if you have that reprogramming authority. And clearly, you need to look at the big picture and look at all of the programs under the purview of the SBA, but I think these are three that really give the American taxpayer the bang for the buck.

What are we talking about in terms of money for the carryover monies that you are talking about?

Mr. HAIRSTON. I am not sure. I don't have that information exactly today, but I can make certain that we provide you with that information.

Mr. UDALL. Do you have a rough range of the carryover monies at all?

Mr. HAIRSTON. About 750,000 total.

Mr. UDALL. Okay, good.

Turning to Barbara Stoller, Barbara, you gave us a couple of examples of success stories, and I think you said at one point that the SBIR program was for a company the only access to seed capital. So in that particular case if the company hadn't had this assistance, they wouldn't have been able to create jobs and go forward with their innovation; is that correct?

Ms. STOLLER. That is correct. I have a few other examples. The State of West Virginia, they have only received three awards from the SBIR program. What one was was an electronic life listen line, which is a sensor system that goes into the helmet of firefighters, and it tracks their vital signs so that they get out of the building if their health is threatened and that they can be tracked. That was from one SBIR program—one SBIR award.

Another is from the State of Iowa, where they have had a program since 1994 where they received four awards totaling \$245,000. This year they received—in 2001, they received 33 awards at \$7.5 million. So this State of Iowa has been implementing a great deal of work and is paying off with awards.

Mr. UDALL. Thank you. I see my time is exhausted, and thank you very much, Mr. Chairman.

Chairman AKIN. Thank you, Mr. Udall.

And Ms. Bordallo.

Ms. BORDALLO. Thank you very much, Mr. Chairman, and our minority leader here, Mr. Udall. To all the witnesses, first of all, I don't think this is something we should be discussing when the economy—you know, we are suffering such a cut in the economy all over, all over the States and in the territories as well. So it is truly not the time to discuss discontinuing very successful programs such as these.

And in the first—I think it is you, Mr. Hairston, that commented on the territories, and of course that sets up the red flag for me, and I am sure any here too. It says since the initial FAST program announcement was issued in April 2001, only Guam, the Virgin Islands, and American Samoa have not submitted a proposal to participate in the program. Why is this? Do you have any idea?

Mr. HAIRSTON. Well, I asked that same question myself, and what I have been advised on that, at this point they have not developed enough interest within the territories themselves to pursue that type of funding. I understand that there is some activity going on, particularly in—I believe it was in American Samoa where there has been some expression of interest. We would certainly welcome the opportunity to work with organizations within those territories—

Ms. BORDALLO. So they have been receiving the proper notification? You have heard back from them? Is this—because I am going

to confront SBA in Guam about this immediately. We have 20 percent unemployment right now, and there are many small entrepreneurs that just haven't been able to—since the economy, since the war, since the typhoons and everything else that hits the islands out there, you know, they have gone out of business. And it seems to me that these are innovative ideas, assistance, and we could certainly use it. So I would ask, Mr. Chairman, if you have any correspondence that you have had with Guam SBA?

Mr. HAIRSTON. I am not certain that we actually do, but I can—any information or any correspondence that we do have, I can certainly make sure that we can get that to you.

Ms. BORDALLO. Very good. Very good. Because I don't want them to come back to me and say they weren't informed or whatever. So whatever you have, I would appreciate it if you could send it over to my office as soon as possible. I am going to take this matter up immediately.

Mr. HAIRSTON. I do know that we make public notice—when we do put out the information regarding the grants, we make public notice regarding the availability of the grants. So we will make sure you get that information.

Ms. BORDALLO. Thank you very much. Thank you, Mr. Chairman.

Chairman AKIN. Thank you very much. Eni.

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman. I am pleading basically ignorance on the fact that I am the newest member of the Committee on the Small Business Administration, and I have gone through your written statement, Mr. Hairston. And I just wanted to get some basic information and facts so that I can better relate to my own questions I wanted to ask.

Our total budget proposed by the administration this year for the SBA is approximately how much?

Mr. HAIRSTON. I don't know exactly.

Mr. FALEOMAVAEGA. In the billions perhaps?

Mr. HAIRSTON. A little under \$800 million.

Mr. FALEOMAVAEGA. Now, my ignorant mind tells me that small businesses throughout America make up 98 percent of the private sector business, if I am correct in that piece of information. And I wanted to ask Mr. Hairston if the amount of allocation that the government is giving to developing the private sector in the small business area where 98 percent of our entire economy seems to have its dependence, at least to promote entrepreneurship, get people off the public payroll, get away from government employment, get into the private sector development—I don't seem to see there is a sense of balance here. If we are making such emphasis in promoting small business and yet we are only allocating \$800 million to promote the most important factor in private sector development, am I wrong in my—am I leading into the next question, Mr. Hairston, in this area?

Mr. HAIRSTON. I would gather from what you are saying is you are asking me if SBA believes that—

Mr. FALEOMAVAEGA. Could we do more with \$800 million?

Mr. HAIRSTON. And one of the things that we are obviously doing with respect to all of our programs, we are certainly reevaluating all of our programs, determining where our priorities should be

placed. We are going through a workforce transformation process and making certain that we properly allocate the resources that we do have available to the programs that are most important to the economy and to the small business sector.

Mr. FALEOMAVAEGA. See, there is a lot of misinformation and misconceptions, even among our own colleagues, especially my good friends on the other side of the aisle, that they look at us as minority members, Democrats, as anti-business, and I would like to submit for the record, Mr. Chairman, this is not true at all. If there is anything that I for one as a member would like to say more strenuously than ever, we want businesses to succeed. We want the private sector to be number one, bar none, as far as getting into the job markets. Look at now college graduates coming out this year, having a very difficult time finding jobs.

So how can we better promote the environment for private sector development? Well, we don't seem to put a high priority in putting the resources that are needed for FAST and SBIR and all these other programs that I think are excellent areas to focus on if our small business community really have needs that are not being met. And I for one do not believe in handouts, as I am sure that every entrepreneur out there, a business person, does not want handouts. All they want is an opportunity, and they will even pay back the loans if necessary, but just an opportunity to be successful to make that American dream a reality.

And I don't want to put you on the spot, Mr. Hairston. If not \$800 million, what is your best guess in terms of what you really need as far as funding is concerned so that SBA can really shine and really show that this one agency is probably the least, I would say not only understood, probably underutilized.

Mr. HAIRSTON. Well, I can only answer that by saying at this time the administration believes that the \$800 million or so is the appropriate number for our agency at this time.

Mr. FALEOMAVAEGA. Do you think that there is going to be an increase by the administration if we believe so much in private sector development?

Mr. HAIRSTON. I am not aware that there are any intentions to increase that, no.

Mr. FALEOMAVAEGA. I see. Well, it is pretty easy to find \$60 billion to help with the mess that Saddam Hussein has created, but to ask for even a billion more to do SBA with 98 percent of our whole economy depending on small businesses out there, I don't see the logic.

And, Mr. Chairman, I do want to thank you. I just want to state that for the record. We on this side of the aisle, we absolutely support business development. We want businesses to make reasonable profits. At the same time, I think there has got to be equity and fairness for the working people out there to make sure that they are not underpaid and get it to the principles of collective bargaining that are necessary. But more than anything, Mr. Hairston, I just wanted to kind of get a sense from you if we are not doing our part, what can the administration do to help us so that we can be a partnership working together to enhance the programs that SBA is espousing, especially these four programs that I sense that are very important for our small businesses out there in America?

Mr. FALEOMAVEAGA. I just wanted to share that. Thank you, Mr. Chairman.

Chairman AKIN. Thank you. I appreciate your thoughts and comments. I look forward to having a moment or two, I think part of what our job is here today, and we don't have a whole lot of time to do it, but at least to ask the questions, and there are all kinds of things you can do if you got a certain millions of dollars to help businesses. I think the reason we are here is to balance the cost versus the return. I think that is the question before us, cost versus return. First of all, if you were to add these programs up, are we talking about \$800 million? Is that what these programs in total are costing the taxpayers?

Mr. HAIRSTON. The FAST and rural outreach programs.

Chairman AKIN. That is the first thing. How much money are we spending on the different programs? You say you have got 800 million SBA. Is that across the whole board?

Mr. HAIRSTON. That covers our administrative costs and our loan programs, and all of our other programs.

Chairman AKIN. The programs we are talking about more specifically here, the MEP, the FAST and those others, what do we have in overhead? What is that costing?

Mr. HAIRSTON. The overhead is probably in the neighborhood of \$600,000 to administer the SBIR, which encompasses FAST and the rural outreach programs. The grant programs themselves are about \$3.5 million.

Chairman AKIN. And so it is really a combination, too, you got administrative costs and you got these different grants that are out there.

Mr. HAIRSTON. Exactly. Obviously that doesn't include the MEP program.

Chairman AKIN. MEP is a separate deal under——.

Mr. HAIRSTON. Under commerce.

Chairman AKIN. How much is the MEP? Anybody happen to have that number? What are we putting in terms of dollars?

Mr. HAIRSTON. I don't know the answer to that.

Chairman AKIN. Most of you, or all of you, really work with businesses and small businesses. One of the things you have to pay attention to is return on investment when you are doing different things. And that is, to some degree, the way that I think in reference to this hearing. I am curious. What is our return on investment on the money? Is it working out fine? I mean, there are other ways to try to create an environment that is pro business. We have the undistinguished position, and I don't know we could have planned this if I had been working on it, to have lost more jobs of any State in the country. We have lost more jobs than California has lost. This is just flat more jobs lost.

And we have done that because we have scorned business in our State because of the policies of our State government. And we have done that because we raised taxes, because we haven't dealt with workers' comp. And a number of other things and the cost of doing business. People leave because we have created an economic environment that is poisonous to business. And that is why we have the worst record than any State in the union. And I understand that. I came from the business world.

The thing I am not clear on is to what degree can we add and actually help businesses with these Federal programs. Does this really help them or would it do better to have less taxes and have the programs gone? And I wanted to hear just some practical examples. And another thing I would be interested in is I would like to see a simple cost justification of the different programs. Give us examples of excesses. We know what that does for more revenue for government, State and Federal governments because you have a successful business. That is taxpayers and that is jobs and there is an economic impact to that. And that is what we realize is the key to keep everything going. What is the benefit there and what is the cost and has anybody run numbers like that to justify these particular programs? That is an open question for anybody.

Mr. HAIRSTON. We don't have the ability to quantify the result. I think we measure results at this point in what we see in terms of the data we are getting back from the participating agencies, which indicates that there is a significant increase in the number of proposals that are being submitted. Across the United States, we are seeing greater participation level from States that previously were low participants. We are seeing more awards per agency. This year—

Chairman AKIN. So you are measuring progress in terms of number of awards?

Mr. HAIRSTON. We are looking at the overall impact. We are seeing an increase in the number of proposals that are being submitted. We are seeing more small businesses participating. We are seeing more awards throughout the agencies themselves and among more States. And we are seeing—and we are being reported at substantially increased quality in the proposals that are being submitted. I don't think we have actually done any real quantitative look at what that real return is in terms of the dollars that we are actually putting in at this point. I think what we are seeing now is just the last 2 years we are actually seeing substantial increase in the dollar awards.

Chairman AKIN. Is there any control on the businesses that are taking those awards? Is there a cost to them for taking that award or is that, in a sense, just free money for them?

Mr. HAIRSTON. The phase 1 award is basically a grant. And they are basically—they are expected to produce a deliverable, which is a concept. Phase 2 similarly is to carry—

Chairman AKIN. Do they have to pay that money back?

Mr. HAIRSTON. No, they don't.

Chairman AKIN. So if they don't have to pay the money back, there is an incentive who wants to get a business going to get that free money and use it to help develop your business, right?

Mr. HAIRSTON. I don't think it works that way because they are responding to a technical proposal. And if they don't demonstrate the ability to be able to meet the requirements of that technical proposal—it is not a giveaway or a free grant. There is an expectation.

Chairman AKIN. There is an expectation based on it. I am still trying to get to the cost justification. It would be interesting to take your numbers rather than just number of grants to actually see now 5 years later what happened to those grant recipients, what

is the status of those businesses. Did we, at a critical point, come alongside of them and put another small business on the map, or was this just an expensive Federal program in terms of how much money it is costing? It would be interesting to have a little bit better data rather than just the number of grants. I don't know that that measures success.

Examples, Dr. Nichols, I know you are coming from a guy who started three of them yourself. What is your sense of this? We got a certain number of taxpayers dollars. Is this a good use of them?

Mr. NICHOLS. I think it is a very good use of them. What you need to keep in mind, even on phase 1 for small business, that \$100,000 is not going to keep that company sustained. That is a very small part of the overall budget for that company. And depending on the company and depending on the resources, it may be a third or a fifth of what they really need to maintain that company.

So, one of the biggest problems we found was people getting phase 1's and then not being able to act on the phase 2's because they didn't have the resources available to them. One of the things I pointed out in my testimony is that we are also tying these people to other sources of income in our State. For instance, venture capital. So this becomes really something that people can use then as credibility, in other words, by getting a phase 1. It's not so much the money as it is that credibility that they can take to other markets to get funding.

Chairman AKIN. Do you have built into your program, then, the ability to analyze technologically whether we are dealing with something that is going to repeal the law of gravity, or is that something that kind of gives them the good seal of approval?

Mr. NICHOLS. Exactly. And just like the review that I will be in tomorrow at the National Science Foundation, there will be 10 or 12 of us sitting around the table to review the proposals not only from the scientific aspect, but also from business aspect. The other thing I might mention to you, what was the Ballistic Missile Defense Organization did quite a bit of study on the success of these companies down the road. And for a basic investment they had made, about \$5 million, that became about \$50 million in actual returns and revenues. I might also mention there is a report out—

Chairman AKIN. Who made the 5 million investment?

Mr. NICHOLS. The SBIRs.

Chairman AKIN. This is for the missile defense program.

Mr. NICHOLS. They track that and I can get those figures for you. I might mention to you in some of the States, like there is a report that was put out by the Southern Growth Conference called Innovation U, and they tracked a number of universities that were able to utilize these programs as well as the small businesses. And what they found was States like Utah, for example, they get a large number of SBIRs and they are able to take those SBIRs and create approximately \$500 million in general revenue back to the State.

So there are 44 businesses. So that particular number I do remember. So that is the kind of return you can get. And the same number is held true in that BMD study. What I would say in Missouri right now for the \$300,000, basically you get \$100,000 for the

FAST program and \$200,000 had to come out of the university's own budget. For that \$300,000 we upped the amount of money that came into the State by \$3 million. So that is a 10-to-1 return, and that is a good investment for anyone. And I think those numbers are available and I can provide more of them for you.

Chairman AKIN. Speaking for myself, that is of interest as we look at this question to try to balance it out. And anybody else want to piggyback on that? Mr. Albers or—

Mr. ALBERS. You asked if there are other things we should give more priority to that would help business, and my answer is we need both. You mentioned workers' comp. Simplification in Missouri. Definitely needed. Might have a bigger impact in any of this. But I firmly believe that these types of programs that the level they are funded now are necessary and a good investment. I wouldn't say that you should triple them or something like that. I think in Missouri, the MEP is funded by both the State, and I think some of the money comes from NIST. And if I remember correctly, and I don't have the exact amount, but the Missouri budget is 1.3 million or something like that for MEP. And I think it is a damn good investment.

Chairman AKIN. Thank you. Last comment.

Ms. STOLLER. You talked about return on investment. I am glad you mentioned 5 years. The Harvard Business Review states 7.5 years to be able to calculate a return on investment for a company. Another time issue is that a phase 1 proposal—you have 6 months to perform your feasibility of it. Now, depending on which agency and when their next deadline is, a phase 2 allows you 2 years to build prototyping. That sounds like 2½ years, but based on deadlines, et cetera, it could be 3½ to 4 years just to get through the SBIR process. So New Mexico is working on this tracking, but there is a time issue. I have only been involved in the FAST program for half a year. So I can't give you strong numbers until I have some experience with it. Cutting it off now cuts all my momentum.

Chairman AKIN. I appreciate everybody's testimony this morning. Thank you for coming in for the interest—eager interest, I might say. And perhaps some of you might have a couple of minutes. If we have individual questions, we can meet with you after the hearing. So this concludes the hearing.

[Whereupon, at 11:20 a.m., the subcommittee was adjourned.]

W. TODD AKIN, MISSOURI
CHAIRMAN

TOM UDALL, NEW MEXICO
RANKING MINORITY MEMBER

Congress of the United States

House of Representatives

108th Congress

Committee on Small Business

Subcommittee on Workforce, Empowerment and Government Programs

2361 Rayburn House Office Building

Washington, DC 20515-6519

OPENING STATEMENT

6 MAY 2003

SUBCOMMITTEE CHAIRMAN W. TODD AKIN SUBCOMMITTEE ON WORKFORCE, EMPOWERMENT & GOVERNMENT PROGRAMS

“Hearing on the Current and Future States of the SBIR, FAST and MEP Programs”

Good Morning.

Over the course of the last several months, a number of small business groups and owners have expressed their concerns to me and my staff regarding the elimination of federal funding for programs such as, the Small Business Innovative Research Program (SBIR); the Federal and State Technology Partnership Program (FAST) and the Manufacturing Extension Partnership Program (MEP). They have encouraged me to seek continued federal funding.

Both the SBIR and FAST programs are run out of the Government Contracting & Business Development directorate of the Small Business Administration. Since its creation in 1982, the SBIR program has supported thousands of companies through awards for research and development. When the SBIR program was reauthorized in 2000, one of the changes made was the formation of the FAST program. The FAST program distributes competitive grants to States. This financial assistance is designed to enable the States to better support their respective SBIR programs. Presently, the SBA is not be able to fund the FAST program and is attempting to make the program workable under funding awarded at the State level.

Department of Commerce's National Institute of Standards & Technology (NIST) runs the MEP program. The stated purpose of the program is to "increase the competitiveness of small and midsize U.S. manufacturers by bringing them state of the art technology and helping them institute best business practices." At its creation in 1988, the MEP program was given a sunset date, which has subsequently been extended. The President's FY04 budget calls for

the elimination of funding for the MEP program as originally intended by the Reagan Administration.

In large part, I initiated this hearing for the express purpose of providing supporters of these programs their "day in court", so-to-speak. How successful are these programs? Have they met the expectations for which they were originally designed? Will eliminating these programs truly have an adverse effect on small business? In my mind, these and other question remain to be answered.

I look forward to hearing the testimony of our guests, who, I hope, will help answer some of these questions.

STATEMENT
of the
Honorable Tom Udall, Ranking Member
Subcommittee on Workforce, Empowerment and Government Programs
House Committee on Small Business
May 6, 2003

Thank you, Mr. Chairman.

Today our economy faces an uphill battle. The latest figures reveal that the unemployment rate climbed to six percent in April, with 8.8 million people across the nation currently out of work.

One of the small business sectors that has weathered the most in this current economic slump is manufacturing. The manufacturing sector has been in steep decline since the beginning of 2000, with a net loss of more than 1.9 million factory jobs. This does not bode well for the U.S. economy as a whole, since the manufacturing industry is one of its cornerstones.

Our economy needs the right medicine to heal its ailments – and one prescription is small business. Small businesses are the lifeline of the American economy. They create three out of every four new jobs, they make up half of our GDP, and are largely responsible for new innovations and technologies. They can lead our economy out of the current downturn and back on the road to recovery, but we need to give them a little help – and the right tools in order to do so.

The right tools exist through federal programs like the Small Business Innovation Research (SBIR) program, the Federal and State Technology Partnership (FAST) program, and the Manufacturing Extension Partnership (MEP) program. Each of these important initiatives could help revive many small business industries, including the weakened manufacturing sector, which

is an overwhelming factor in the overall economic recovery of this nation. But in the latest budget, none of these programs received any funding, which seals their fate by ensuring their failure.

The SBIR program is testimony to the fact that small businesses have been responsible for the most significant innovations of the 20th century. The program was created to ensure that small businesses would be able to contribute to federal research and development (R&D) projects. Over the years, there has been no question the SBIR program is beneficial and fully lives up to its mission. But the awards are concentrated in too few states and fail to permeate rural and economically depressed areas.

To address this, the FAST program – a five-year temporary initiative – was created in 2000. As a grant program designed to not only increase SBIR awards in states that have historically low volumes of them, but also to increase awards in low- and moderate-income areas of states, including rural areas, FAST helps to channel these types of opportunities where they are needed most.

In fact, I am proud to say that we have a witness here from my home state of New Mexico – Ms. Barbara Stoller – who will talk about this program’s many success stories, including an SBIR recipient that is now the largest employer of Native Americans in one of the poorest areas of the state. Such job creation, innovation, and economic growth in New Mexico would not have been possible without this program.

Another federal initiative that gives small businesses – namely manufacturers – access to the tools they need for success is the Manufacturing Extension Partnership (MEP) program. Created in 1989, the MEP program is a network of more than 400 not-for-profit centers nationwide that

helps sustain entrepreneurial development by providing small and medium-sized manufacturers with technical and business solutions.

MEP aids businesses in areas like process improvement, quality management systems, business management systems, human resource development, market development, materials engineering, environmental and financial planning and e-commerce.

Manufacturing firms that have utilized the program have seen nearly \$2.3 billion in new or retained sales, \$482 million in cost savings, and \$873 million in new investment.

Even though these programs are vital to supporting small businesses, they give our government the most bang for the buck, and they make good business sense, their very existence has been threatened by lack of funding.

Prompted by this, in March, my colleagues and I released a report entitled the “Impact of the FY 2004 Budget on Small Business.” This report detailed these small business programs – and more than 20 others – that saw either cuts or complete elimination in the administration’s 2004 budget. The SBIR, FAST and MEP programs are the latest casualties in a time of a weakened economy, ballooning deficits, and budgetary restraints.

But it is these programs that are exactly what this economy needs to get back on track. In helping small businesses, these programs nurture the entrepreneurial spirit and small business growth that has made the U.S. economy the strongest in the world.

Today we are here to discuss these programs, to learn about their many successes, and to find ways to keep pressure on the administration to fully fund them. Small businesses can help stabilize the economic situation in the U.S., but they need these programs. Without programs like SBIR, FAST and MEP, we will certainly see our economic doldrums continue. Thank you.

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WRITTEN
STATEMENT OF

DARRYL HAIRSTON
DEPUTY ASSOCIATE DEPUTY ADMINISTRATOR
OFFICE OF GOVERNMENT CONTRACTING
AND BUSINESS DEVELOPMENT

U. S. SMALL BUSINESS ADMINISTRATION

SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM
AND
THE FEDERAL AND STATE TECHNOLOGY PARTNERSHIP (FAST)
PROGRAM

BEFORE THE
HOUSE COMMITTEE ON SMALL BUSINESS
SUBCOMMITTEE ON THE WORKFORCE, EMPOWERMENT AND
GOVERNMENT PROGRAMS

MAY 6, 2003

Good Morning Mr. Chairman and distinguished members of the subcommittee, thank you for inviting me to discuss the Federal and State Technology Partnership (FAST) Program. This program provides technical assistance to small businesses that compete for grants and contracts under the Small Business Innovation Research (SBIR) and the Small Business Technology Transfer (STTR) Programs.

SBIR is a highly competitive program that encourages a small business to explore its technological potential and provides the incentive for the firm to profit from its commercialization. By including qualified small businesses in the nation's research and development arena, high-tech innovation is stimulated and the United States gains innovative approaches that meets its specific research and development needs. Since its enactment in 1982, as part of the Small Business Innovation Development Act, SBIR has helped thousands of small businesses to compete for federal research and development awards. Their contributions have enhanced the nation's defense, protected our environment, advanced health care, and improved our ability to manage information and manipulate data.

STTR is another important small business program that expands funding opportunities in the federal research and development arena. A key component of

the program is expansion of the public/private sector partnership to include joint venture opportunities for small business and the nation's premier nonprofit research institutions. STTR's most important role is to foster the innovation necessary to meet the nation's scientific and technological challenges in the 21st century. Conversely, nonprofit research laboratories are instrumental in developing high-tech innovations. But frequently, innovation is confined to the theoretical, not the practical. STTR combines the strengths of both entities by introducing entrepreneurial skills to high-tech research efforts. The technologies and products are transferred from the laboratory to the marketplace. Small businesses profit from the commercialization, which, in turn, stimulates the U.S. economy and supports jobs.

In the 2000 SBIR Reauthorization Act, Congress authorized the FAST program to strengthen the technological competitiveness of small business concerns in all 50 states and 5 U.S. territories. FAST is a competitive program that allows each eligible state and territory to receive funding in the form of a cooperative agreement to provide an array of services in support of the SBIR and STTR programs. Any individual, organization, or entity in a state is eligible to participate in the FAST program. Congress also extended the SBIR Rural Outreach program which provides 25 states an opportunity to receive grant

funding to support statewide efforts to increase their participation levels in the SBIR and STTR Programs. These states met the criteria established in Public Law 105-135 as states receiving less than \$5 million in SBIR and STTR awards during FY 1995. A list of the FAST and SBIR Rural Outreach awardees, along with examples of program success stories as reported by the states can be viewed on the SBA SBIR website at www.sba.gov/sbir.

SBA continues to support the Administration's request for FY 2004 funding of \$3 million and \$500,000 for the FAST and Rural Outreach Grant Programs, respectively. The President asked for the same level of funding in FY 2003 but Congress did not appropriate any funds. SBA does not plan to allocate funds for the FAST and Rural Outreach Programs in FY 2003. Therefore, SBA is working with the existing FAST and Rural Outreach grant recipients to use their existing grant funds to maximize their efforts to assist small businesses during this fiscal year. Participating agencies in the SBIR and STTR Programs have reported a significant increase in the number of proposals received for their current solicitations, which we believe is attributable to outreach and training provided by FAST and Rural Outreach grant recipients.

The SBA, in partnership with the FAST award recipients is helping to create new educational and outreach-mentoring programs that will assist states increase their rate of small business growth and success. Many small businesses are unsuccessful during the innovation commercialization process. While entrepreneurs are technically capable, they often lack the business skills and contacts required to bring innovations to the marketplace. In addition, the small business risk is pushed to extremes in rural environments where access to experienced mentors is limited. The combination of innovation commercialization challenges and rural dispersion puts many small businesses at high risk for failure.

Through the FAST program, state commercialization workshops deliver innovation commercialization solutions directly to the small business owners. The workshops consist of highly focused modules taught by subject matter experts with small business experiences. In addition, workshop participants are teamed with experienced mentors and research experts who will guide the small business owner through the commercialization process, serving as a resource for a full year following the workshop. The result is a strong knowledge base backed up by a

network of professionals who will support small businesses to become expert researchers and innovators, and commercialize their innovations. The FAST recipients help to bring together small businesses with a network of mentors and experienced based professionals to reinforce their skills and gain a common understanding of research and development and commercialization.

In its third year of operation, the FAST program continues to meet its objectives and impacts the technological capabilities of small businesses within the states, while building sound technology state infrastructures for innovation and commercialization of products and services. In FY 2001, SBA issued 30 awards to the eligible states totaling \$3.5 million, and in FY 2002 issues 27 awards totaling \$2.7 million. Since the initial FAST program announcement was issued in April 2001, only Guam, the Virgin Islands and the American Samoa have not submitted a proposal to participate in the program. SBA has provided funding to 40 of the 55 eligible states and territories in the first 2 years of the FAST program.

SBA has included guidance for the FAST program in the revised SBIR and STTR Policy Directives. As required by law, SBA is in the process of drafting more detailed regulations for the FAST program. The SBA has taken the time to carefully address program administration concerns raised since the issuance of the

first program announcement. SBA plans to release these regulations as soon as possible for public comment.

SBA continues to assist small businesses with the challenges they face in doing business with the government. In support of the Administration's electronic commerce initiative, the Department of Defense (DOD) used an electronic proposal submission process to receive SBIR proposals in response to their two recent SBIR solicitations. However, DOD experienced unforeseen system problems which caused numerous small businesses to encounter difficulties submitting their proposals electronically. DOD received several GAO protests filed by small businesses because they were unable to submit their proposals through the DOD system successfully or in a timely manner. Based upon the protests, DOD reopened the solicitation for a short period to allow small businesses a second opportunity to submit their proposals. As part of our oversight responsibility, SBA worked with the DOD SBIR Program Administrator to determine and implement backup procedures that can be put in place to ensure that this proposal submission process runs smoothly in the future. SBA, through its program Policy Directives, will request all participating agencies in the SBIR and STTR programs that use electronic proposal systems to implement similar backup procedures and include them in future SBIR and STTR

solicitations. On a bi-annual basis, SBA will request the agencies to provide an update on any changes they may have made to their backup procedures. We believe these backup procedures will help to ensure that small businesses do not miss out on valuable research opportunities in the SBIR and STTR programs.

Thank you for the opportunity to appear before you today. I will be happy to answer any questions you may have.

Testimony

Workforce, Empowerment and Government Programs Subcommittee (*Small Business*)
Dr. Michael F. Nichols, Director
Missouri Federal and State Partnership Program
Missouri Small Business Development Centers -- University of Missouri Outreach and Extension
May 6, 2003

Mr. Chairman, Members of the Committee,

Thank you for this opportunity to speak to you today regarding one of the most powerful federal programs ever created to drive economic development.

The U.S. Small Business Administration's Federal and State Technology Partnership Program is the perfect catalyst to drive innovation, commercialization and the realization of entrepreneurial dreams all across this nation. The FAST program is responsible for the creation of companies, jobs and profits. Moreover, it rewards the technological creativity of our citizens with seed capital and technical assistance that enhance research, development and commercialization efforts. It is a program that has proven its value in countless ways, yet it is a program that is coming under undue scrutiny this year and runs the risk of being eliminated. I'm here today to offer my thoughts, comments and experiences and to hopefully convince you to preserve the funding for this vital program.

FAST is the SBA's delivery mechanism for assistance in the development of Small Business Innovation Research (SBIR) proposals. It is a highly competitive program that annually awards \$1.5 billion in research and development awards and serves as the premier funding source for small companies developing next-generation technologies, products and services. A complementary program, the Small Business Technology Transfer program, or STTR, provides funding to small high-technology businesses that collaborate with non-profit research institutions in research and development projects.

Missouri is in its first year with the FAST program, which is hosted by the University of Missouri via the Missouri Small Business Development Centers (SBDC). Historically, Missouri's performance in the SBIR/STTR arena has been less than stellar. Between 1983 and 2000, Missouri attracted only 178 awards. In 2001, Missouri ranked 40th in the nation in the number of successful SBIR applications.

By way of comparison, California, which is ranked number one, received 933 awards in only one year. Texas, ranked number eight, received 173; New Mexico, ranked 13th, received 94; Illinois, ranked 16th, received 75 and New Hampshire, ranked 22nd, received 63. Clearly, this program has great importance to members of this subcommittee.

In 2002, the inception of the program in Missouri, Missourians received 32 awards, compared with a total of 16 awards in 2001. In the first quarter of 2003, Missourians have already received another 12 awards. It is important to keep in mind that it is very early in the funding cycle for most agencies to announce awards and since September 2002 we have help clients submit 62 proposals. We expect the award numbers to grow dramatically in coming months. In addition, our SBIR applicant clients have been successful in attracting nearly \$3.5 million in angel or investor funding on their way to competitive SBIR awards.

Our goals are to help stimulate technological innovation and technology transfer; help businesses win SBIR and STTR awards; and to bring Missouri up in the rankings of successful SBIR awards, specifically to increase applications and awards by at least 20 percent each year.

We intend to accomplish this by providing technical assistance that includes monitoring federal agencies for funding opportunities and facilitating mentoring relationships for client firms with SBIR/STTR experts and former winners. We assist with proposal preparation, offer funding to help with the proposal generation process and provide linkages to external expertise, facilities and equipment.

As can be seen in these other highly successful states, the potential economic development benefit of this program to Missouri, which can be extrapolated to the nation, is enormous. The program has been designed to bridge the gap between the lofty halls of academia and the creative entrepreneurial sector. The funding provided via the SBIR/STTR program reduces the risk of innovation and, in essence, buys the time for small companies to develop the next generation of an already successful idea or to envision a new direction. The beauty of this largest single source of seed funding is that it does not dilute the company's equity. Successful performance with a government award of this kind can open the door to future procurement contracts and to venture capital investments.

In residence at the University of Missouri, the FAST program has the additional potential to attract research funding of nearly \$30 million to the University in the next three to five years at the same time providing outstanding real-world cases on which university students in both technical and business fields can work. This helps cultivate the next generation of entrepreneurial companies, which are the engine of our current and future economy. We are particularly excited in Missouri that the success of the FAST program will allow us to keep the technology and proceeds from its commercialization in

our state rather than exporting the talents and the economic rewards of it to another state. I'm sure the same is true in every state represented here today.

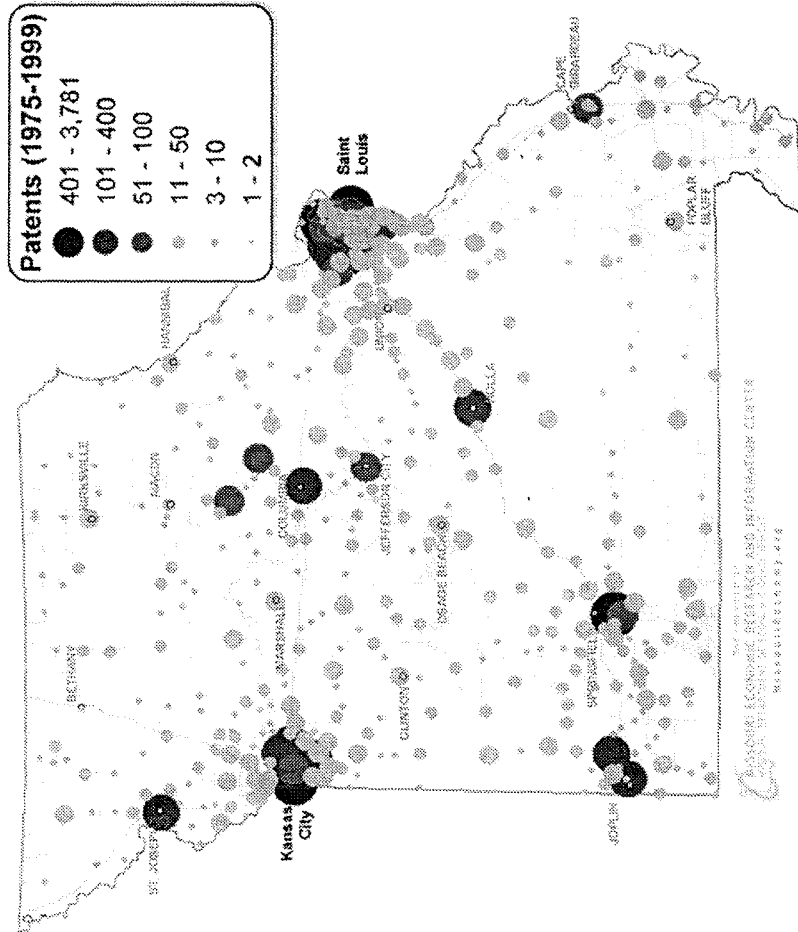
The ideas and innovations nurtured by SBIR/STTR funding can be found in any community, in almost any subject matter you could envision. In Missouri, our clients include a vast array of possibilities that can create huge economic impacts at the same time they improve the human condition in a variety of ways. Current clients include a single molecule detection company seeking opportunities in homeland defense; a laser manufacturer pursuing Department of Defense and NASA topics; network security and IT systems management technology; a radio-peptide cancer imaging therapy; asphalt regeneration using recycled tires and plastics; a developer of a portable anesthesiology unit; and a developer of adenoviruses for cancer gene therapeutics. As powerful as their ideas are, many innovators do not understand how the FAST program can fit them. They do not know how to target the right topic, nor do know how to write a proposal. That is how FAST can help, working behind the scenes to help the client take the innovation to market.

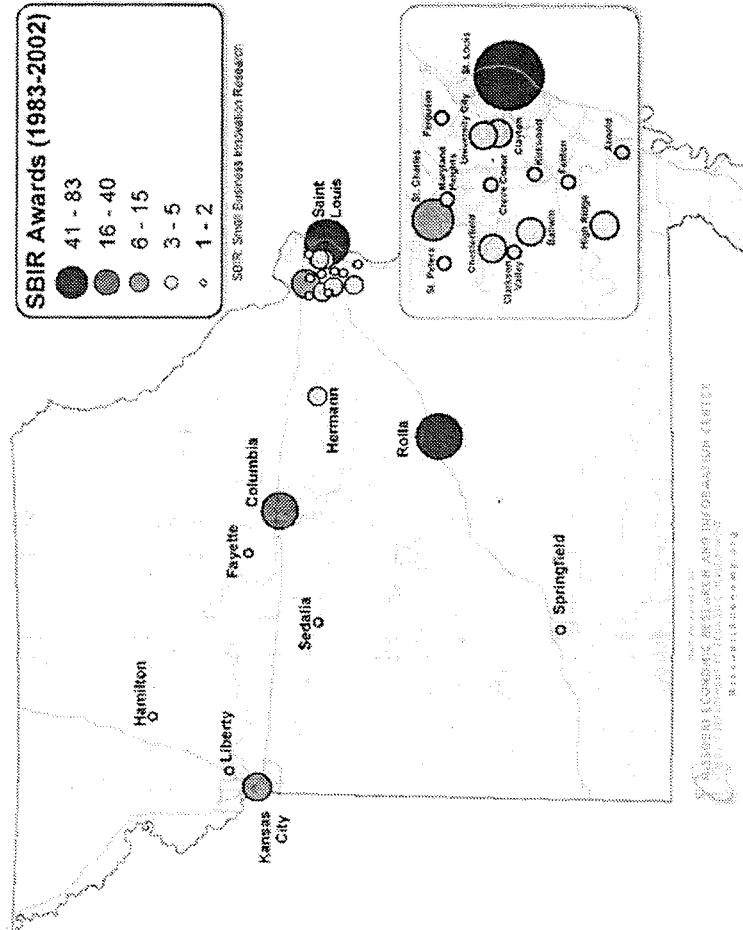
Such was the case with a company rooted in a small community in southeast Missouri. A local internist with an interest in infectious diseases worked with a research colleague to develop the perfect combination of chemicals to slowly release carbon dioxide to attract mosquitoes and ticks to a glue trap in which they meet their demise. This pound of cheap, dry, environmentally friendly chemicals, nestled in a contraption that looks remotely like a Coleman camping lantern, emits CO₂ for nearly 170 hours, attracting the pests that are responsible for West Nile and lyme disease. The U.S. Army is very interested in this, as you can imagine, and it's likely that other agencies will be as

well. This company, Ticks or Mosquitoes, is on the brink of a huge economic return, but the owners would tell you that having the idea is not enough. Assistance to help them capitalize on the opportunity is essential and invaluable. That is what the FAST program is for.

FAST is an outstanding example of an effective and efficient, well-managed federal initiative that works and deserves your support. Even though in Missouri the federal investment is only \$100,000, the return on the program to date is more than ample evidence of its potential.

Thank you.





The Story of the ToM Trap

Missouri Small Business Development Center THE MISSOURI FEDERAL AND STATE TECHNOLOGY PROGRAM

It's a sad day for ticks and mosquitoes.

But Ed Masters doesn't care.

Now, he says, through "a bit of skill, a lot of intuition, a whole lot of luck and a series of events that were stunningly fortuitous," what he knew would work finally does.

It's a block-shaped pound of everyday chemicals.

"Heck," Ed says, "you could feed this to your kid and it wouldn't hurt him!"

Ed should know. He's a physician who has been in private practice in Cape Girardeau for many years. He's always had an interest in infectious diseases – especially ones borne by insects. His little block of chemical now gives him the upper hand. What's in it?

Baking soda, urea and lactic acid in a combination it took nearly 10 years to find. The combination seems ordinary, but the results are lethal to insects responsible for some of the worst diseases of the modern era – West Nile, lime disease and many others. For after being heated during the day, this innocuous combination goes to work at night to emit carbon dioxide – good old CO₂ – what Ed calls, "the bugs' dinner bell."

This little pound of powder sits in the new invention from Ticks or Mosquitoes – Ed's new company – in a contraption that looks like a cross between a Coleman lantern and a UFO – the ToM Trap. It emits the harmless gas that calls the mosquitoes to the red portion of the apparatus and the ticks to the black base. There, they meet their demise in a glue trap.

"If you want to grow this economy," Ed says, "ours is the kind of business that needs to be nourished and cultivated. This is what creates jobs and wealth. Policymakers need to pick their winners and nurture them."

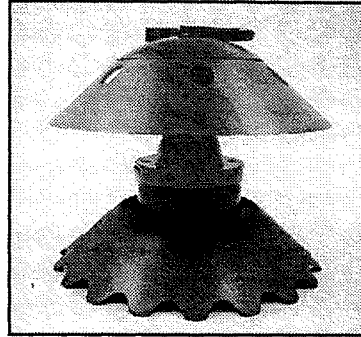
"Carbon dioxide is the reason these critters are drawn to us," Ed says. "It's just simple chemistry. But the beauty of this is we do it without flames, electricity or harm to the environment. There is nothing dangerous about this – well, unless you're a bug."

Simple chemistry? Maybe. But finding the right concoction was not. Ed worked on it with his colleague, Tom Kollars, an entomologist based in Maine, years ago, but the right formula eluded them. Last year, while visiting Tom, Ed convinced him that they should go at it again. Two days later, Ed says, they "cracked the code." Ed and Tom hold the international patent.

"We figured this out and celebrated," Ed says. "Then we looked at each other and said, 'Well, now what do we do with this?'"

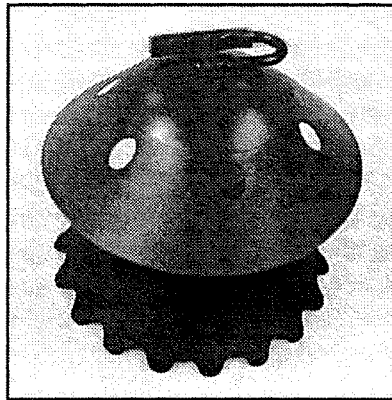
A few weeks later, Steve McPheeters, another of Ed's friends from Sikeston, heard a presentation by the Missouri Small Business Development Centers at a meeting of the Missouri Chamber of Commerce. He told Ed to "go see those guys right away."

That led Ed to Mike Nichols, director of the Missouri Federal and State Technology Partnership (MoFAST) and John Parfet, University Outreach and Extension business and industry specialist, for help. The MoFAST program



is the University of Missouri's program to assist innovators, researchers and university faculty with applications to the federal government's Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) programs. MoFAST, which is based within the SBDC, is available to anyone in the state with an interest in commercializing a product or attracting seed capital for its further development.

MoFAST and the SBDC were just the ticket for Ed. He enlisted two business partners – his son, Jordan, an MBA student at Southeast Missouri State University, and Joe McPheeters, Steve's son, a former pharmaceutical salesman, who is now director of sales for Ticks or Mosquitoes.



In less than 10 months, the trio of entrepreneurs developed the product, protected it, formed a limited liability corporation and attracted \$1.2 million in private investment. They're in the process of perfecting the ToM Trap's design, and they'll have it on the market by May. That's a lot of progress for a little company still based in Ed's basement.

"Our company doesn't even have windows yet," Joe jokes.

Though their surroundings are humble, their plans are not.

"This idea has tremendous potential to solve a host of problems," Ed says. "For obvious reasons, the Army has shown interest in this. And we think many other agencies will as well. It has tremendous biodefense potential. That's why we're investigating the SBIR and federal government contracting opportunities."

The beauty of the trap is its convenience and safety, Jordan says. "You can put this in your back yard, move it around every few days and have no risk of environmental harm or harm to animals or kids. It would be great to place around stables. One block of chemical lasts 170 hours. And the entire package will sell for slightly more than \$100."

But it's not about the money. Like most entrepreneurs, Ed, Joe and Jordan see beyond themselves and their idea.

"We want to keep the economic potential for this in Missouri," Joe says. His enthusiasm is infectious. "We're planning to manufacture these in Bloomfield. The chemical mix will be produced in St. Joseph. One of our labs will be in Advance (Ed's hometown). The jobs and wealth this creates will stay here in this state."

"If you want to grow this economy," Ed says, "ours is the kind of business that needs to be nourished and cultivated. This is what creates jobs and wealth. Policymakers need to pick their winners and nurture them."

Which is just what the SBDC and the MoFAST program did. Ed says Mike and John were taskmasters, which is just what the trio needed. "They kept our feet to the fire, reviewed our business plan, got us ready for investors, kept us focused and made sure that we're ready to go after SBIRs and other grants," Ed says. "Starting a business is hard. We know our product, but we don't have practical knowledge. It's a big leap from idea to product. These guys are the ones who said, 'Have you thought of this...' and 'What about...' It was invaluable. We simply could not have done it by ourselves. And we sincerely believe this could be a major industry in southeast Missouri."

Ed adds, "What did Winston Churchill say... 'Most people, when they stumble on an opportunity, just pick themselves up and keep going?'"

"We're trying not to make that mistake."



Thank you for inviting me to address this subcommittee and tell you about a subject that I feel is of critical importance to manufacturers in our state and nation.

I am Rolf Albers, Chairman & CEO of Albers Manufacturing Company, Inc. Our plant is located in O'Fallon, Missouri, which is just west of St. Louis. I also serve on the board of the Missouri Chamber of Commerce and the National Federation of Independent Business. I am currently involved in the formation of a new organization, the Missouri Association For Advancing Manufacturing (MAAM) to be a united voice for those Missouri companies on the front line of manufacturing.

At Albers Manufacturing, we currently have 35 employees and manufacture a variety of electrical equipment for industry. I am here today to testify on behalf of my company to recommend that you continue funding the Manufacturing Extension Partnership (MEP). I have no personal experience with SBIR or FAST. However, over the last 10 years I have had numerous occasions to use the services of Missouri Enterprise Business Assistance Center, which manages the Manufacturing Extension Partnership here in Missouri.

Missouri has lost over 77,000 jobs over the last 18 months. In my opinion, there are many reasons for this, but in general it has to do with the way Missouri supports manufacturers and small business. In my opinion Missouri is not as business-friendly as it should be.

The state of Missouri has joined the Department of Commerce in funding the Manufacturing Extension Partnership. If federal or state funding were to be reduced, companies like mine would lose a valuable resource. The Manufacturing Extension Partnership has made it possible for me to purchase a variety of services at reasonable rates. Without the Manufacturing Extension Program my company probably would not have been able to afford them. In fact, we might not have access to them at all.

For example, Albers used the Manufacturing Extension Partnership to search for an ERP (Enterprise Resource Planning) software package suitable for the needs of a small manufacturer. They had the capability to help define our needs and select the most suitable package. We chose a software package called "JobBOSS", which has served us well over the last 5 years. It has made Albers more efficient because it puts all our information in one single "user friendly" database. Previously, four different and unconnected software programs handled many of our functions. New orders were entered in three different database programs. Now quotations and orders are only entered once. Shop floor scheduling is included, as well as inventory control and all accounting functions. We can now print job travelers and control our jobs on monitors placed on the shop floor. This reduced our overhead and enabled us to stay more competitive.

When Albers decided to implement an ISO 9000 quality management system, training and seminars conducted by the Manufacturing Extension Partnership helped my employees understand the

subject and the process. We were able to implement such techniques as Kanban, 5-S and others, all of which contributed to improved efficiency and our competitiveness.

The Manufacturing Extension Partnership also assisted Albers Manufacturing when we needed to expand and re-organize the factory layout. The experts from the Manufacturing Extension Partnership provided the special know-how required for an efficient floor plan.

All of these valuable technical services were available to us at a cost we could afford because the Manufacturing Extension Partnership is a true public-private partnership that is specifically designed and structured to assist small and medium size companies that, by the way, employ 60% of the workforce in the U.S. Their experts are all experienced, talented and dedicated. They have not only talked the talk, but also walked the walk. It is the role of the Manufacturing Extension Partnership to collaborate with public and private leadership to reverse the flow of jobs out of our state and our country.

Some of Albers Manufacturing employees, me included, have participated in Manufacturing Extension Partnership sponsored seminars. Again these services are either not offered by anyone else, or they tend to be priced beyond our means.

We have lost over 60% of our business in the last two years because most of our customers were in the telecommunications industry, which as you know is experiencing a major downturn. In an effort to locate new

customers in different industries, we have had to rely on the resources provided by the Manufacturing Extension Partnership to help us rethink our marketing approach and diversify our product line.

I know that federal budgets are tight. However, the techniques, technologies and training, available to small and medium size companies like Albers Manufacturing, via the Manufacturing Extension Partnership, are of critical importance. Companies like ours need this assistance to improve our efficiency and compete with foreign competition. Our ability to create and maintain sustainable manufacturing jobs in Missouri and the rest of the U.S. is at stake and organizations like the Missouri Extension Partnership are desperately needed.

Therefore, I urge the members of this important subcommittee to consider the situation facing thousands of companies like mine and to support the Manufacturing Extension Partnership with full funding as the FY 2004 budget process moves ahead.

Thank you again for inviting me to testify.

Testimony given before the Subcommittee on Workforce, Empowerment and Government Programs of the Committee on Small Business of the United States House of Representatives on Tuesday, May 6, 2003.



NM SBIR/ FAST Story – May 6, 03'

House Workforce, Empowerment and Government Programs Subcommittee, House
Small Business Committee. 2361 Rayburn

I'm Barbara Stoller, Director of the SBIR Outreach Program, an activity of Lockheed Martin's Technology Ventures Corporation, and funded by the Los Alamos and Sandia National Laboratories – **and the FAST Program.**

The Small Business Innovation Research Program (SBIR), funded by ten federal agencies with the largest extramural research and development budgets, represents a **phenomenal opportunity for high technology entrepreneurs, engineers and scientists.** The SBIR Program enables them to obtain **seed capital** to demonstrate the feasibility of their innovations and to begin to mature their technologies into commercial products.

Unfortunately, **SBIR Program information does not reach many segments of the high technology business community – or into the engineering and scientific fields.** In addition, even when the existence of the SBIR Program is known, dealing with the Federal Government and the SBIR- participating agencies is a frustrating and overwhelming task to those businesses and individuals unskilled in this craft.

As a consequence of these two issues, lack of knowledge of the SBIR Program and fear of interacting with the Federal Government, our nation suffers the loss of unknown innovations that could significantly benefit this country. This is the major problem the Federal and State Technology (FAST) Partnership Program is designed to mitigate.

The **objective of the FAST Program** is to conduct SBIR Program outreach to get to that very large and dispersed community of high technology small businesses and entrepreneurs, who are either not informed about the SBIR Program or are afraid to attempt to participate in the Program. This is the community the FAST Program serves.

FAST allows participating states to:

- 1) Educate the technical community regarding the existence of the SBIR Program and its variations within the participating agencies;
- 2) Provide training conferences with national experts regarding the process of writing competitive SBIR proposals;
- 3) Develop a cadre of experienced SBIR mentors who can act as advisors to this community of non-participating businesses and entrepreneurs to provide hands-on guidance and advice on how to successfully participate in the SBIR Program;
- 4) Provide the critically needed information on the administrative and financial aspects of doing business with federal agencies and achieving compliance with federal agency acquisition regulations.
- 5) Implement an expert proposal writing panel to manage the proposal writing process.

The mission of the FAST Program: **To assist in bringing innovations to the commercial and government markets which otherwise would never see the light of day through expanded implementation of the SBIR Program.**

By way of **state background**, New Mexico is a **technological rich state** because of its DOE and DOD laboratories. But these laboratory clusters exist within an economically very poor state. New Mexico also has clusters of government-savvy businesses and entrepreneurs, experienced in dealing with the Federal Government and knowing about the SBIR Program, dispersed throughout a much broader community that does not possess this knowledge and expertise.

Here are a few **examples** of how the New Mexico SBIR Outreach Program, **assisted by FAST funding**, has contributed to the development of innovations in our state.

- One company, starting from a SBIR contract, is manufacturing **photovoltaic cells** that are widely deployed to provide power on commercial satellites.
- Another has developed a unique **multispectral camera** that is being flown in space for military and commercial projects.
- A New Mexico SBIR start-up, recently acquired by Boeing, has become a major **developer of components for the airborne laser program.**
- New Mexico has an SBIR start-up company that performs **demilitarization** of munitions, and is one of the **largest employers of Native Americans** in one of the poorest counties in the State.

The founders of many of these companies, however, **had extensive government experience** prior to starting their companies.

Given the technology resources of he State, these companies **are too few in number**. The universities and other industries within the State also represent economic potential that too often fails to be adequately exploited and developed.

But FAST is helping.

New Mexico's SBIR Outreach Program, housed at Lockheed Martin's Technology Ventures Corporation, was initially funded two years ago by the Los Alamos and Sandia National Laboratories.

New Mexico received its **first FAST funding six months ago**. So far, the New Mexico SBIR Outreach Program has the following accomplishments:

Provided **five SBIR Basics Courses in three different locations** around the State.

Hosted the **National SBIR Conference**, one of the largest held in the country, with **645 registrants, representing 43 states**.

- Assisted **107 companies in one-to-one counseling**.
- Initiated an **electronic newsletter to 700 technologists**.

Already in six months we are achieving success.

A one-person start-up, after attending a SBIR training session, wrote an SBIR proposal to NIH for an **innovative power source concept** for a wheelchair. The proposal was funded and now engineering prototypes are being **manufactured locally**. The societal benefit is a more maneuverable, controllable and powerful mobility device that will increase the safety and freedom of power wheelchair users. Without FAST funding, this innovation might have been lost to society because the SBIR Program represented this entrepreneur's **only access to seed capital**.

A small company making **digital video recorders** wrote an SBIR proposal and received a Phase I award from the Air Force. They developed an **instantaneous** retrieval system for surveillance use in airports, unmanned space vehicles and atmospheric science use.

I am aware of dozens of SBIR proposals that have been submitted by companies and individuals never before involved in the SBIR Program **as a result of a FAST-funded training session**. What major contributions to society await the maturation of these innovations?

The FAST Program is allowing SBIR information to be spread throughout the State. In addition to engineers and scientists, we are now interacting with **farmers, ranchers, miners, and environmentalists**, all of which have innovative technological ideas and all of which can benefit from SBIR funding

How many of these innovations and success stories will be lost if FAST funding is discontinued?